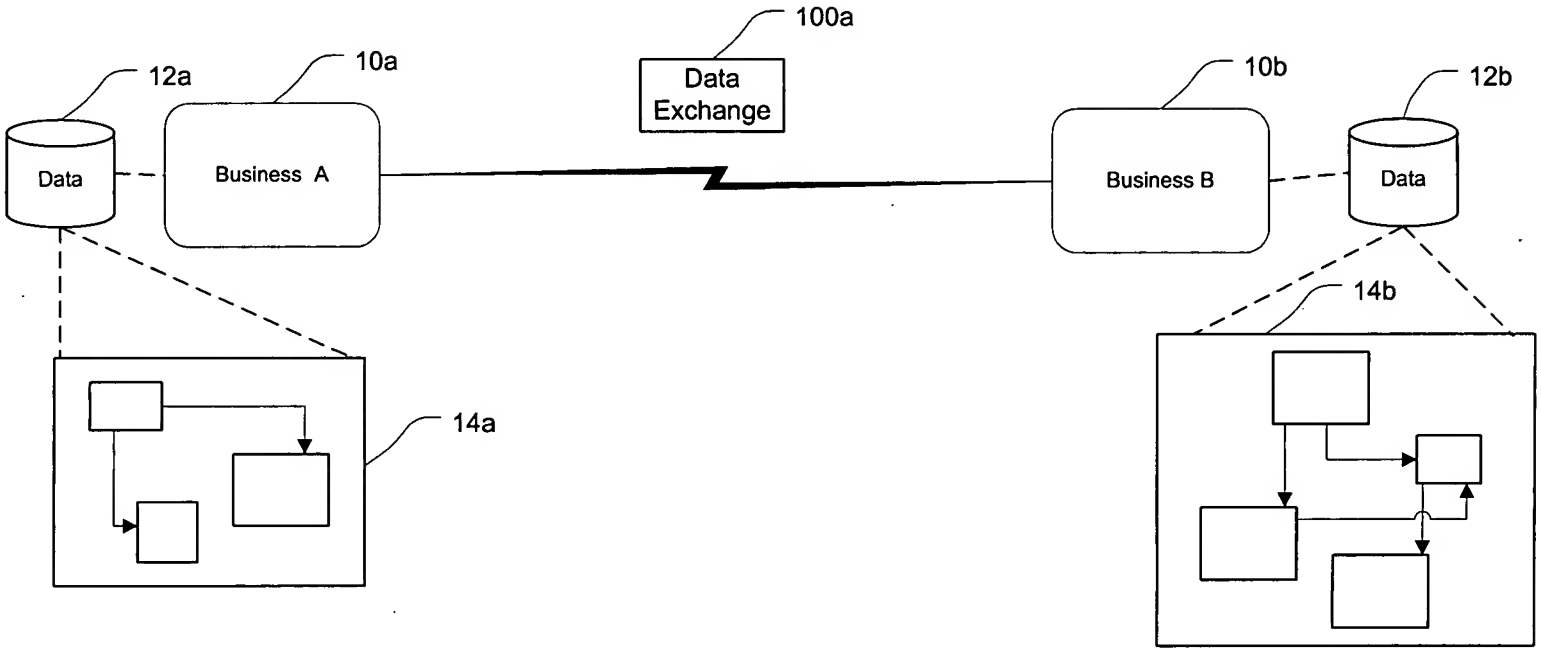

100a
Data Exchange
12a
10a
Data
Business A
10b
12b
Business B
Data
14b
14a

Figure 1

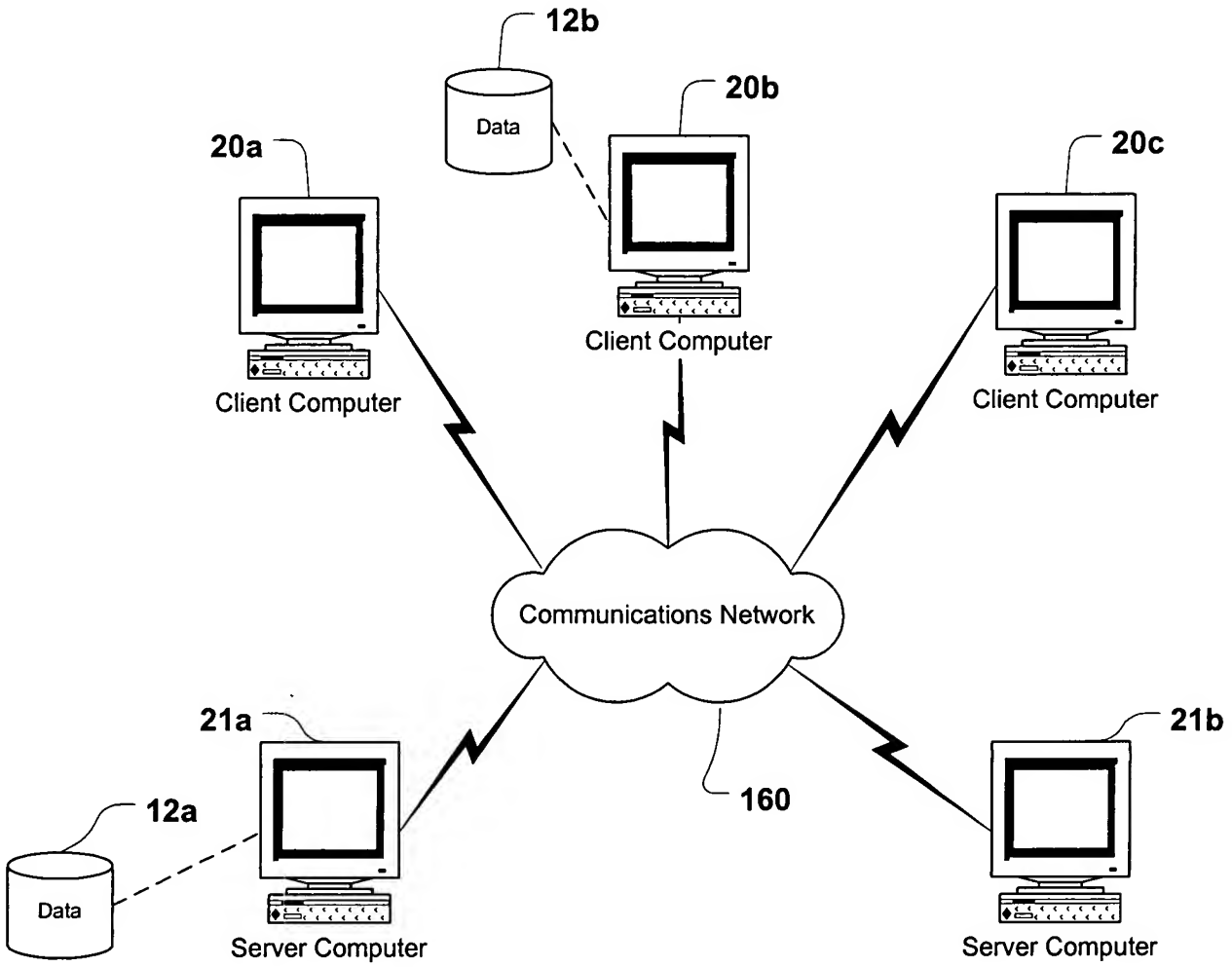

12b
Data
20b
20a
20c
Client Computer
Client Computer
Client Computer
Communications Network
21a
21b
160
12a
Data
Server Computer
Server Computer

Figure 2

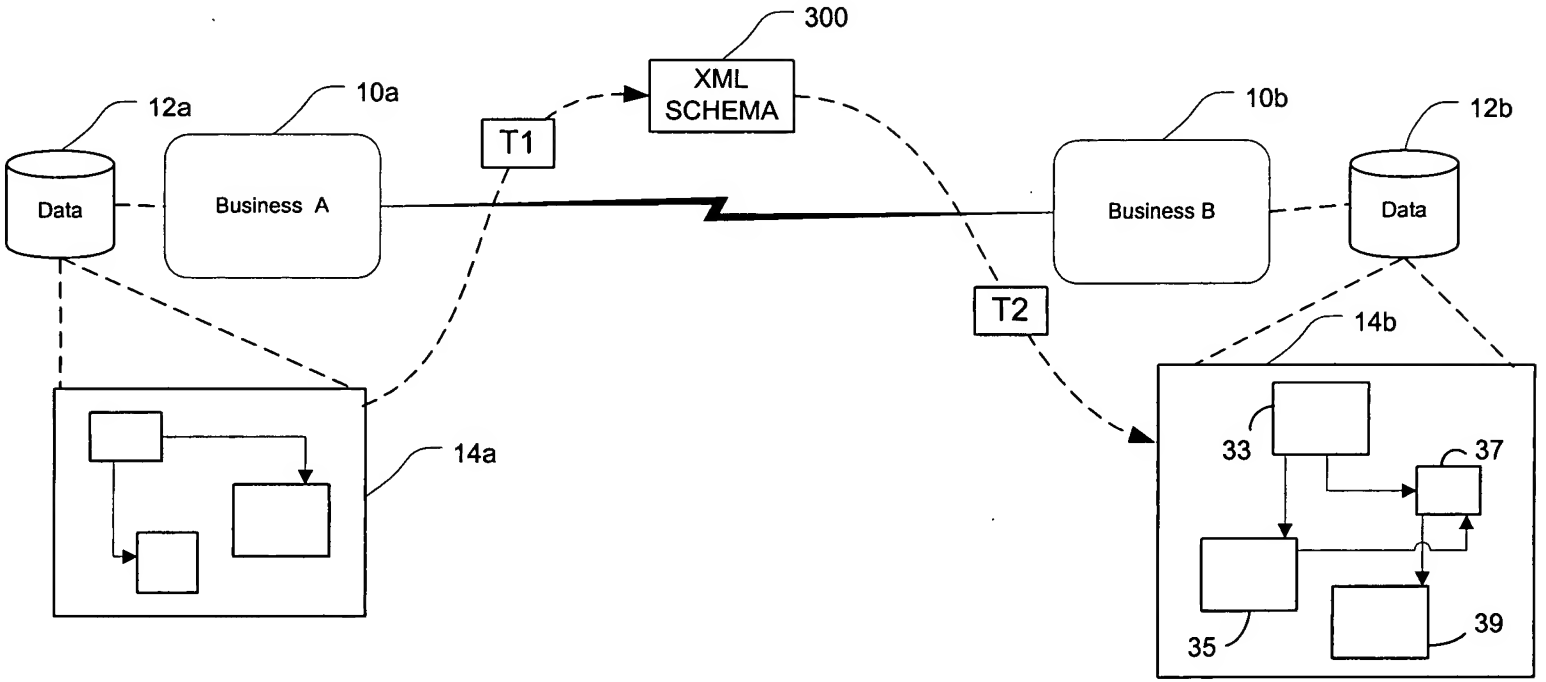

300
XML
SCHEMA
12a
10a
T1
Data
Business A
10b
12b
Business B
Data
T2
14b
14a
33
37
35
39

Figure 3

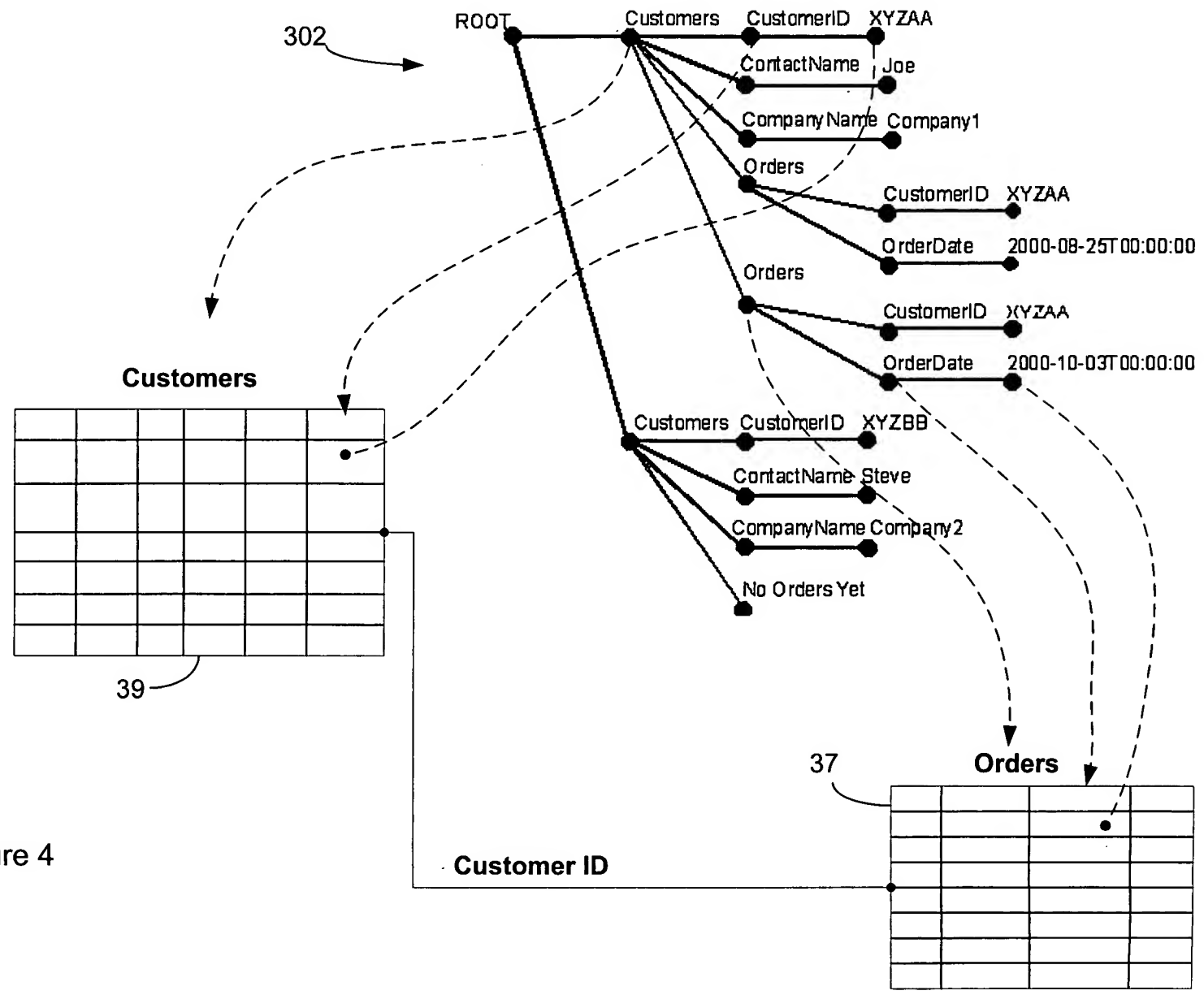
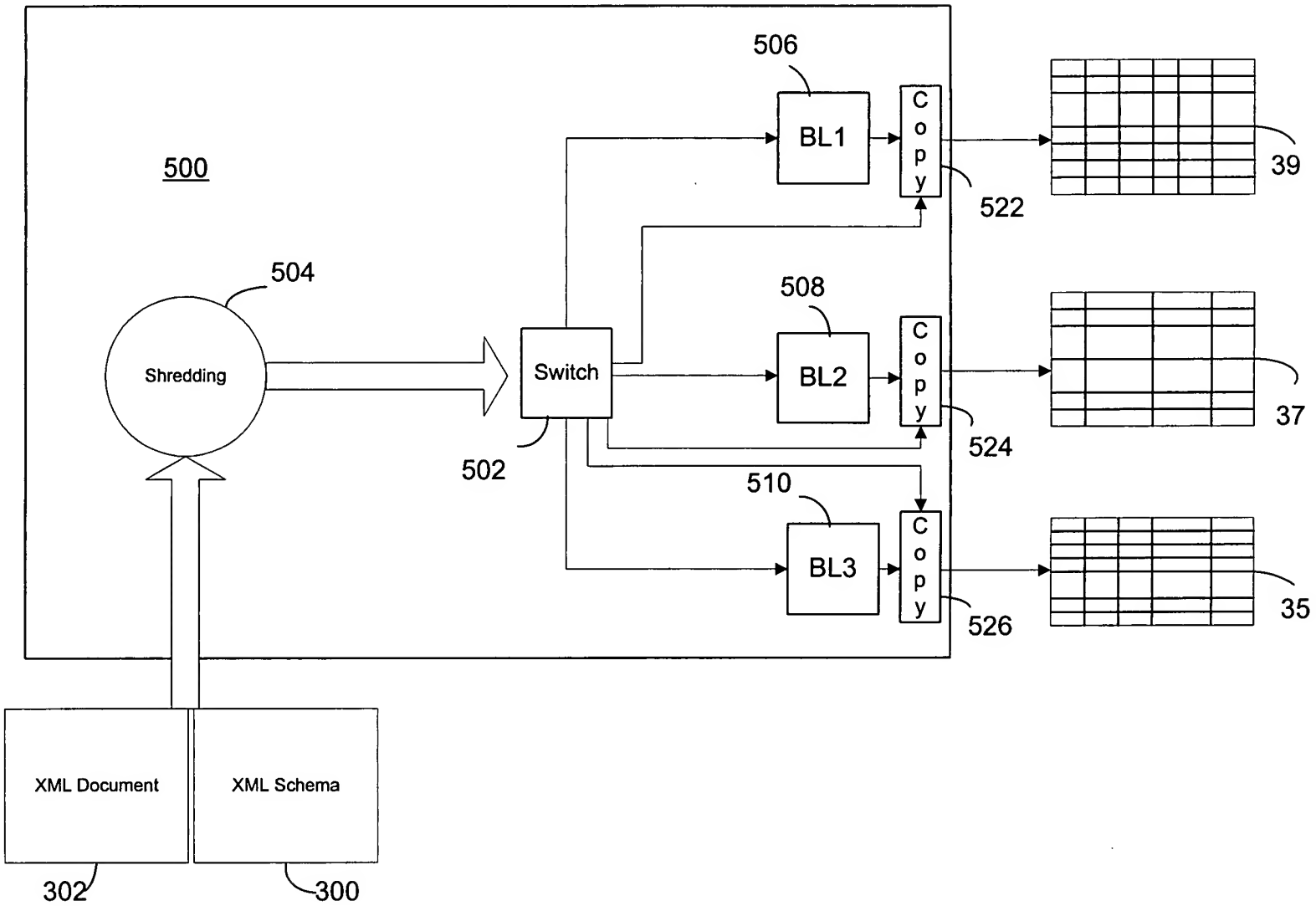

302
ROOT
Customers
CustomerID XYZAA
ContactName Joe
CompanyName Company1
Orders
CustomerID XYZAA
OrderDate 2000-08-25T00:00:00
Orders
CustomerID XYZAA
OrderDate 2000-10-03T00:00:00
Customers CustomerID XYZBB
ContactName Steve
CompanyName Company2
No Orders Yet
Customers
39
37
Orders
Customer ID

Figure 4

Figure 5


500
506
BL1
Copy
522
39
504
Shredding
508
Switch
BL2
Copy
524
37
502
510
BL3
Copy
526
35
XML Document
XML Schema
302
300

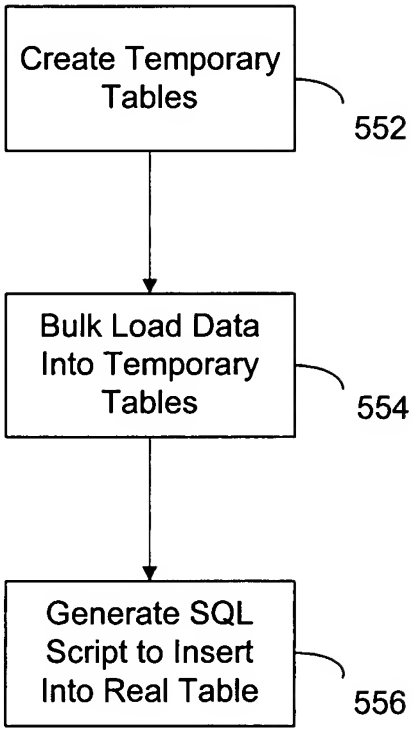

Create Temporary Tables
552
Bulk Load Data Into Temporary Tables
554
Generate SQL Script to Insert Into Real Table
556

Figure 6A

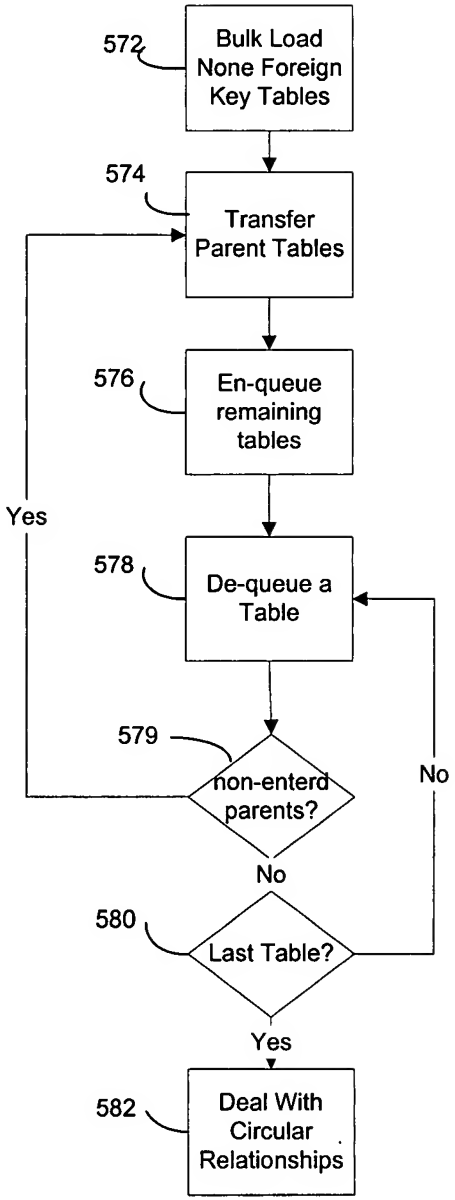

572
Bulk Load None Foreign Key Tables
574
Transfer Parent Tables
576
En-queue remaining tables
578
De-queue a Table
579
non-enterd parents?
Yes
No
No
580
Last Table?
Yes
582
Deal With Circular Relationships

Figure 6B

Docket No.: MSFT-0766/191575.1
Inventors: M. Rys, C. Suver, B. Denuit, S. Burugapalli, M. Low
Filing Date: Herewith Serial No.: Not yet assigned
Title: System and Method for Loading Hierarchical Data into Relational Database Systems
Page 8 of 8

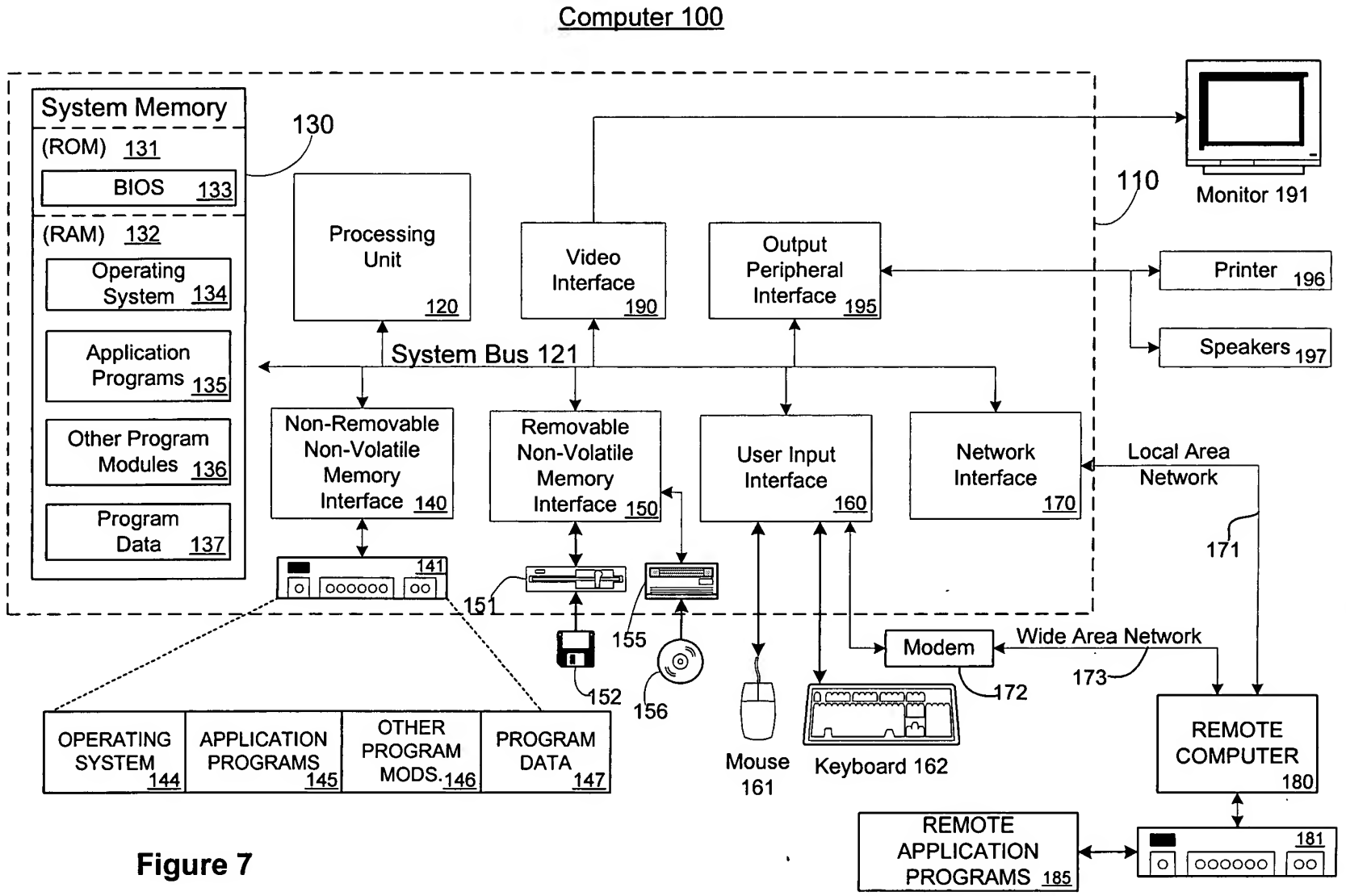


Figure 7